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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NICHOLS II, ROBERT K

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3754

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,014	Applicant(s) MIHASHI ET AL.	
	Examiner ROBERT NICHOLS II	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1,3 and 4 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/23/2011</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/23/2011 has been entered.

Response to Amendment

This office action is responsive to the amendment filed on 06/23/2011. As directed by the amendment: claim 1 has been amended, claim 2 has been cancelled, and no new claims have been added. Thus, claims 1, 3 and 4 are presently pending in this application.

Information Disclosure Statement

The information disclosure statement filed 06/23/2011 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because applicant has failed to provide a legible copy of the non-patent literature publication or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that

Art Unit: 3754

the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

Claim 3 is objected to because of the following informalities: Claim 3 recites “said bottle does not have an outer layer” in line 2. To avoid any confusion it is suggested to amend to --wherein said bottle is a monolayer bottle--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2002/0130139 to Shiraishi et al. (Shiraishi) in view of US Patent 5,497,910 to Meadows et al (Meadows).

In Reference to Claim 1

Shiraishi teaches:

A discharging container with a filter (1) comprising:

a bottle (2) which is formed in a manner wherein an inner layer (22) peelable from an outer layer (21) is formed on an inner surface of the outer layer (fig. 1;)

a plug body (3) placed on a mouth portion (2a) of the bottle (fig. 1); and

a hydrophilic filter provided (7) in a discharging pass which is provided in the plug body for discharging liquid kept in a body of the inner layer (fig. 1 and para. 67);

Shiraishi further teaches:

a dispensing valve (8) having a memory which expands the valve in a manner wherein a difference between an inner negative pressure and an ambient air is higher than a filtration resistance of the filter and lower than an air filtration resistance of the filter wetted (see page 6, [0075] last 7 lines); and

the negative pressure is caused by the memory of the valve (8) and by that liquid remained in a second side of the filter is sucked into a primary side of the filter (see [0043] and [0053]).

Shiraishi differs from the claim in that it is the resilient dispensing valve (8) and its associated connector sleeve (83) which causes the remaining liquid to be sucked into a primary side of the filter rather than the memory of inner layer (22) which is disclosed to be made of a synthetic resin made of a resilient material (see [0057] and [0060]).

Meadows teaches:

In Figs. 1-3 of a dispenser similar to that of applicants' and Shiraishi to make an inner layer (inner bottle 30) from a resilient (compressible) material (LDPE) configured so as to create a "suck back" vacuum (see col. 4, lines 57-62; col. 5, lines 35-43).

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the teaching of Meadows (i.e. using the characteristics of the compressible inner bottle to suck back liquid) in the dispenser of Shiraishi, for the predictable result of creating negative pressure, since the finite number of options (i.e. an inner layer having a memory, or a resilient valve having a memory) are within the technical grasp of a person of ordinary skill in the art.

In Reference to Claim 3

See Shiraishi Fig. 1.

In Reference to Claim 4

Shiraishi teaches to make the inner layer (22a,b) of a synthetic resin (plastic [0060]) as does Meadows (low density polyethylene; col. 5; ll. 40-41). However the average thickness of the inner layer being over 0.35 mm is not taught.

Meadows does however explicitly teach:

“Wall thickness of the inner and outer bottles 30, 12 is of importance in the operation of the dispensing system 10. In this regard the wall thickness will, of course, depend not only on the surface tension of the formulation, but on bottle 30, 12 material, size and shape.” (col. 5, lines 30-34).

Consequently, Meadows explicitly teaches that the inner layer wall thickness is an art recognized results effective variable to be selected based on the surface tension of the formulation, and on bottle 30, 12 material, size and shape. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention to have selected the inner layer thickness to be over 0.35 mm through routine experimentation to optimize dispensing characteristics for a given formulation and bottle of selected material, size and shape as the optimization of an art known results effective variable would have been within the ordinary level of skill in the art as taught by Meadows.

Response to Arguments

Applicant's arguments filed June 23, 2011 have been fully considered but they are not persuasive. In regards to the claim amendment applicant is referred to Shiraishi paragraph 75, lines 18-24, wherein Shiraishi teaches the filter, being a filter wherein liquid is filled inside the filter (i.e. via liquid sucked back from the downstream end into the liquid cavity or upstream side of the filter) and ambient air is prevented from entering into the liquid cavity or upstream side of the filter.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that it would have not been obvious to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Shiraishi discloses a discharge container including a bottle 2 having an inner layer 22 and an outer layer 21; a plug body 3; and a hydrophillic filter 7; wherein the discharge container further includes means (resilient valve 8) for creating negative pressure, but differs from the instant claims in that Shiraishi is silent to the means for creating negative pressure being the memory of the inner layer.

Meadows teaches a discharge container including a bottle 10 having an inner layer 30 and an outer layer (i.e. 110, fig. 4); wherein the inner layer is from a resilient (compressible material) for creating negative pressure.

Therefore, a person of ordinary skill has good reasons to pursue the known options or finite number of solutions, i.e. an inner layer having a memory, as suggested by Meadows et al., or a resilient valve having a memory, for the predictable result of creating negative pressure, since the finite number of options are within the technical grasp of a person of ordinary skill in the art.

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT NICHOLS II whose telephone number is (571)270-5312. The examiner can normally be reached on Mon-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. N./
Examiner, Art Unit 3754

/KEVIN P. SHAVER/
Supervisory Patent Examiner, Art
Unit 3754